

Determinants of Indonesian Coal Commodity Export Before and Post the Spread of the Covid-19 Policy

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ABSTRACT: As a fossil fuel, most of Indonesia's coal production to date is exported to various countries that still rely on this commodity as a source of electrical energy. With this pandemic, Indonesia's coal exports have decreased. Therefore, the need for coal to meet domestic demand will affect coal exports so that it will have an impact on economic growth. To determine the effect, this study was tested using qualitative research methods. The test results show that during the pandemic, coal consumption or demand decreases and has a negative impact on domestic economic growth.

Keywords: Pandemic effect, export, coal, covid 19 in Indonesia

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INTRODUCTION

Indonesia is known as a country that is abundant in its natural wealth. Where this natural potential is widely used in supporting Indonesia's economic activities, known as transaction activities, both traded in the national scope or beyond in the global scope (international trade) and for export transaction activities between countries, Indonesia is one of the pillars of foreign exchange for the country. The main potential of Indonesia's natural resources cannot be separated from the mining sector, which in 2020 and 2021 is the third largest contributor to state revenue after the Food Product Industry (ISIC 10) and Basic Metals (ISIC 05).

The contribution of the Indonesian mining sector to state revenue in 2020 and 2021, represented by Coal and Lignite for the Non-Oil and Gas sector, 12.10% for coal and 2.27% represented by Lignite, where there was an increase in the total number of exports by 10,186.4 Million US\$ or an increase of 90.26% (coal) and also followed by lignite which increased by 3,055.1 million US\$ or 159.11%, a small number of exports affected by the Covid-19 Pandemic in 2020 when destination countries Many of Indonesia's main exports have implemented a full lockdown to foreign countries with the aim of inhibiting the spread of the Covid-19 pandemic more broadly, the countries contributing to the division of the country are represented by the East Asia Region (Japan, China), South & Southeast Asia (Thailand, Singapore, Philippines, Malaysia) ,then West Asia and Africa.

Based on sources from Indonesian environmentalists, Indonesia's mining potential is ranked the 6th (six) largest country in terms of mining resources, where Indonesia's coal reserves are only 0.5% of the world's reserves, for production Indonesia is in the 6th position. 6 (six) of 246 million Tons, and is ranked 2nd (two) as an exporter (203 million Tons) under Australia with 252 million Tons).

Seeing the enormous potential of the mining sector, a research was carried out which was later taken the title "Determinants of Indonesian Coal Commodities Before and After the Spread of the Covid-19 Pandemic.

PROBLEM FORMULATION AND RESEARCH OBJECTIVES

From the description in the background, it is concluded that what are the factors that cause the size of Indonesia's coal exports before and after the spread of the Covid-19 pandemic before and after the spread of the Covid-19 pandemic, seen from the amount of production, export prices and the US Dollar Exchange rate in general. Simultaneously and partially in influencing the volume of Indonesian coal exports before and after the spread of the Covid-19 pandemic.

THEORETICAL REVIEW

International Trade

According to Tabunan (2001) that International Trade Theory International trade is trade or cross-border transactions in which export and import activities occur, which consists of 2 (two) categories, namely trade in goods and trade in services. In trade, services consist of transportation costs, insurance and remittances such as labor salaries and technology fees or royalties.

Export Theory

According to (Feriyanto, 2016) Export is a trade by removing goods from inside to outside the Indonesian customs territory by complying with the applicable provisions and according to the Law of the Republic of Indonesia No. 17 of 2006 that export is a transaction activity of removing goods or services from the customs area.

In Pridayanti (2013) that the Indonesian Export Theory where developing countries are trying to print an international trade surplus or referred to as net exports, where the volume of export value is greater than the value of imports. If net exports are positive, it can reflect the high demand for domestic goods and services. This has a positive impact on increasing the productivity of domestic economic growth.

Tambunan (2002), explains the export strategy with the Four Generic International Strategies, namely:

- 1) Dynamic High Technology Strategy (DHTS)
A strategy that provides opportunities for companies to become market leaders through appropriate and continuous technological innovations.
- 2) Low of Stable Technology Strategy (LSTS)
This strategy provides an opportunity for the company to become a market leader because of its ability to maintain manufacturing knowhow, brand identity, economies of scale, production standards and the supply of spare parts available globally.
- 3) Advanced Management Skills Strategy (AMSS)
A strategy that provides opportunities for companies to become market leaders because of their ability to implement appropriate management, especially in terms of coordination and marketing.

Then According to (Sukirno, 2000) Three factors determine the level of a country's exports, namely:

1. Competitiveness and Economic Condition of Other Countries In international trade, a country's ability to sell goods abroad depends on its

ability to compete with similar goods in the international market. The size of the market share of these goods abroad is determined by the income of the population in the export destination country.

2. Protection of Other Countries, The existence of protection against imported goods in other countries will affect the decline in the level of exports of a country.
3. Foreign Exchange, The increase in the exchange rate of the importing country's currency against the exporting country's currency has an effect on increasing the purchasing power of the importing country so that the export volume of the exporting country will also increase.

In Amin (2003) exports can be carried out in various ways, namely:

1. Ordinary Exports In the ordinary course of export, goods are sent abroad in accordance with applicable general regulations, which are directed to overseas buyers to fulfill a transaction that was previously carried out with importers abroad.
2. Barter is the delivery of goods abroad to be exchanged directly for goods needed domestically. By shipping the goods, payment is not received in foreign currency but in the form of goods that can be sold domestically to get payment back in rupiah.
3. Consignment 20 What is meant by consignment is the delivery of goods abroad for sale, while the proceeds from the sale are treated the same as those of ordinary exports. However, in terms of sending goods as consigned goods, there are no specific buyers abroad.
4. Package-Deal Basically the same as barter, but consists of various commodities. To expand agricultural products, the government enters into a trade agreement with one of the countries. The agreement stipulates a certain number of goods to be exported to that country and vice versa from that country a number of types of goods produced in that country are imported.
5. Smuggling Smuggling is a business that aims to transfer wealth from one country to another without complying with applicable regulations. The danger of smuggling is the flight of wealth abroad without getting a compensation. This can be interpreted as a drain on the wealth of the state and society.

Exchange Rate

Exchange rate (foreign exchange) is the price or value of a country's currency expressed in the value of another country's currency (Sukirno, 2006). In international trade transactions, there are often exchanges of several different

currencies, where the currency of a country is measured based on the value of the currency of another country. Exchange rates or exchange rates are the prices of foreign currencies (Dornbusch, 2012).

METHODOLOGY

This study uses a qualitative research method that produces descriptive data in the form of writing and opinions from someone who is being observed and becomes the object of research from the researcher. Qualitative research is research that focuses on the process, which aims to produce qualitative information with careful description and analysis. Qualitative research does not describe measurement or other quantitative methods, because qualitative research only describes all the problems studied and observed. Descriptive research is research that aims to explain phenomena or situations that occur in social life, by describing a number of variables studied or related to the research with the problems studied.

The Influence Relationship Between Production Amount, Export Price and US Dollar Exchange Rate on Indonesian Coal Export Value

Research (Airlangga, 2007) If production increases, the volume of exports also increases. With an increase in production, it will be able to meet domestic needs and part of the production can be exported. This increase in exports will cause the country's income in foreign currency (foreign exchange) to increase as well. This will be returned to supporting factors such as permits for the development of productive land clearing that will be easier, increasing human resources financed by the government considering that rubber is very prospective and needed in foreign countries and the government will also build supporting facilities for the mining sector, such as modern technology in stone processing. coal, where there is a positive relationship between the amount of production and exports.

The amount of export value is highly dependent on foreign exchange rates and domestic prices. In research (Denburg, 1994) an increase in the foreign exchange rate (eg due to appreciation), it will have a tendency to create exports. The relationship between foreign exchange rates and exports can be explained by the concept of supply theory where the supply is exports from the country concerned, while the price referred to in this case is the foreign exchange rate. Supply theory states that if the price increases, the supply of the commodity will also increase. Conversely, if the price is low, the number of goods offered will decrease (Sukirno, 2000). So the foreign exchange rate has a positive relationship with exports. If the value of the foreign exchange rate (United States dollar) increases, exports will also increase.

RESEARCH METHODS

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DISCUSSION

Indonesian Coal

Indonesia is known as a country with natural resources. Starting from biological resources to mining products, such as coal. One of the biggest mining potentials in Indonesia is coal. According to the latest data from the Ministry of Energy and Mineral Resources (ESDM), Indonesia's coal reserves are still 38.84 billion tons with an average production of 600 million tons per year.



Figure 1 : Indonesian Coal Distribution Map

In addition to coal reserves, Indonesia also still has coal resources of 143.7 billion tons. Potential coal reserves in Indonesia are mostly found on the islands of Kalimantan and Sumatra. Kalimantan Island holds reserves of 62.1% of the total potential reserves and the largest coal resources in Indonesia, namely 88.21 billion tons of resources and 25.84 billion tons of coal reserves.

Indonesian coal exports

According to the Minister of Energy and Mineral Resources (ESDM) Arifin Tasrfin, the volume of Indonesia's coal exports in the first seven months of 2020 was recorded at only 238 million tons with a value of US\$ 10.13 billion, the decline was caused by the performance of coal exports due to the Covid-19 pandemic. which resulted in a decrease in coal demand in the global market, as well as a decrease in national coal production which resulted in a decline in coal price trends, a drop in global demand, and limited access and mobility. The decline in global and national economic growth due to the COVID-19 pandemic in 2020 had a significant impact on the movement of the coal commodity price index.

The COVID-19 pandemic caused coal demand in 2020 to decline due to lockdowns in various parts of the world or restrictions on economic activities, thereby reducing the need for electricity which resulted in a decrease in coal demand. The decline in coal demand was also accompanied by a downward trend in coal prices which began in the first quarter and managed to rebound in the fourth quarter of 2020.

Table 1 : Coal Export Projection on China Demand



During the pandemic period, coal commodity was one of the commodities that experienced a very deep decline due to the drop in economic activity due to the lockdown policy which caused demand and coal prices to experience a sharp decline. In the second quarter of 2020, Indonesia's coal exports contracted by -33.2% (yoy). Even in the third quarter of 2020, coal export performance continued to decline by -5.4% (qoq). Indonesia's coal exports began to improve in the fourth quarter of 2020 with the improvement in world coal prices. In the fourth quarter of 2020, it is estimated that Indonesia's coal exports will rebound with growth of

24.7% (qoq), although on an annual basis it is still experiencing a contraction of -17.2% (yoy).

Coal Prices During a Pandemic

The Covid-19 pandemic that has occurred since early 2020 until now has hit the performance of the business world in Indonesia, one of which is in the mineral and coal mining sector (minerba). The movement of coal prices will greatly depend on the global economic recovery, especially the economy of the main importing countries of Indonesian coal, such as China. In addition, the Chinese government's policy on coal import quotas will still overshadow the movement of coal prices.

The Institute for Energy Economics and Financial Analysis (IEEFA) conducted a study that measured the resilience of the Indonesian coal industry in the midst of the Corona or Covid-19 pandemic. As a result, the fall in coal prices has the potential to threaten the financial condition of 6 of the 11 companies on the Indonesia Stock Exchange (IDX). The IEEFA is considering a fall in the reference price of Newcastle coal from US\$70 per tonne in January 2020 to US\$58 per tonne.

Coordinating Minister for the Economy Airlangga Hartanto said the Covid-19 pandemic had caused a contraction in the coal mining sector. The contraction is reflected in the still low realization of exports, domestic demand, and falling coal prices. Domestic demand for coal or DMO is also estimated to only reach around 141 million tons by the end of this year. This projection is below the set target, which is 155 million tons. The Covid-19 pandemic has caused the price of coal commodity to plummet from US\$66.89 per tonne in February 2020 to only US\$49.92 per tonne in September 2020.

To anticipate the weak demand for coal, Executive Director of the Indonesian Coal Mining Association (APBI) Hendra Sinadia said the association is currently actively collaborating with Indonesian embassies in various countries to open new market potential for Indonesian coal, such as in Pakistan and Bangladesh.

Coal commodity prices reached USD87.4/MT on January 15, 2021, an increase of 9.94% ptp from USD79.5/MT in the previous month's position. The increase in global coal prices is still caused by the prospect of increasing demand, especially from China as one of the largest coal consumers and importers in the world. In the first quarter of 2021, global coal prices are projected to be in the range of USD70.0/MT.

Table 2 : World Coal Price Growth



China has committed to a purchase agreement for Indonesian coal with a value of USD 1.47 billion in 2021 (about 10% of Indonesia's total coal exports in 2020) which is influenced by several factors. First, China previously experienced an energy crisis due to a decline in domestic coal production coupled with a dispute with Australia which caused the Chinese government to block coal imports from Australia. As a result, China itself experienced a large increase in coal demand which made coal prices soar to the level of USD 80 per MT. Second, the limitations of China's domestic production of coal.

Impact of Covid-19 on Mining

Indonesia as one of the countries rich in natural resources can be said to be in the moderate category because some commodities are not too affected, such as gold, copper, but indeed coal is included in the category that has a fairly high disturbance.

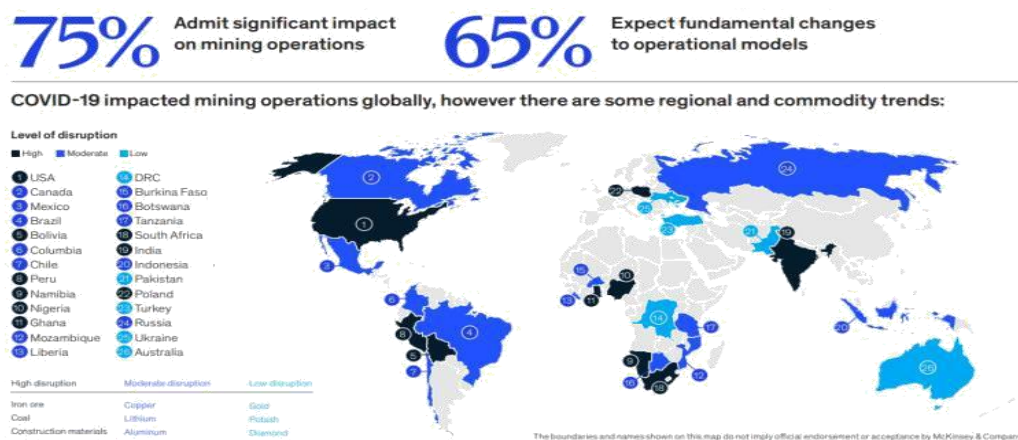


Figure 2 : The Covid-19 Pandemic Impacts Mining Operations

Impact of Covid-19 on Coal Demand

Table 3 : Impact of Covid-19 on Coal Demand

2020 Permintaan Batu Bara Kedepan (mt)	@ Januari 2020 (Pre-COVID)	Hari Ini (COVID)	Deviasi (mt)	Deviasi (%)
China	200.3	190.0	-10.3	-5.1%
India	180.0	140.0	-40.0	-22.2%
Phillipines	30.0	25.0	-5.0	-16.7%
Japan	128.0	120.0	-8.0	-6.3%
Korea	100.0	90.0	-10.0	-10.0%
Taiwan	55.0	50.0	-5.0	-9.1%
Other Global	286.7	280.0	-6.7	-2.3%
Total Permintaan	980.0	895.0	-85.0	-8.7%

This Covid-19 resulted in a decrease in demand of 85.0mt. The decrease in demand is estimated at 85.0mt as a direct impact of Covid-19 in the current year 2020. In addition, there is the potential for a further decline in demand if the "lockdown" is extended beyond the previously announced schedule. .

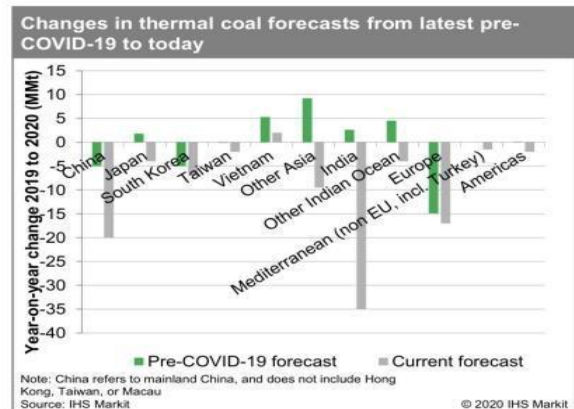
The regional quarantine (lockdown) in China in the first quarter of 2020 and the continued lockdown in India and the Philippines had the greatest impact and influence on coal demand. The movement of Indonesian coal was greatly affected by the regional quarantine in several of the above countries, considering that these 3 (three) countries (China, India and the Philippines) contributed to 65% of Indonesia's total coal exports.

Projected World Coal Demand (Post Covid-19)

Table 4 : Projected World Coal Demand (Post Covid-19)

Total thermal imports			
Market	2019	2020	Change
Mainland China	219	199	-20
Japan	125	121	-4
South Korea	110	103	-7
Taiwan	58	56	-2
Vietnam	34	36	2
Other Asia	99	89	-10
India	184	149	-35
Other Indian Ocean	32	28	-4
Europe	91	74	-17
Mediterranean (non EU, incl. Turkey)	54	53	-2
Americas	33	31	-2
Africa (non Mediterranean)	2	1	0
Global			-100.2

Source: IHS Markit © 2020 IHS Markit



A number of domestic coal companies still see bright export business prospects in 2022. This demand for coal is supported by energy needs during the economic recovery period when the Covid-19 pandemic subsides. Head of Corporate Communication of PT Adaro Energy Tbk (ADRO), Febrianti Nadira explained, next year export market demand is expected to continue to grow and support the company's performance. In addition, the easing of the Covid-19 pandemic is also expected to be accompanied by economic growth, which means energy needs will also grow. APBI Executive Director Hendra Sinadia said, China as one of the main export markets has the potential to increase coal demand.

The recovery of Indonesia's coal exports in 2021 will be quite dependent on China's coal purchase commitments. If this can be done immediately, Indonesia's coal exports in the first quarter of 2020 can begin to lift. However, if with a normal trend, coal exports may only occur in the second quarter of 2021 due to the low-based effect and the loosening of activities of several Indonesian trading partner countries that have started to vaccinate.

CONCLUSIONS

The Covid-19 pandemic has made coal exports dim. Not only coal but to other mining. With this pandemic, it is possible for the country of Indonesia to rise again to increase coal exports to various other countries.

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